DUPLICATE

Before the FEDERAL COMMUNICATIONS COMMISSION BY Washington, D.C. 20554

MAR 28 1988

In re Application of:) MAIL BRANCH
CAPROCK EDUCATIONAL BROADCASTING FOUNDATION)) File No. BPED-831220AD
	REC'D MASS MED BUR
For Modification of a Construction Permit for New Non-Commercial Educational FM Station Lubbock, TX	APR 8 - 1988
To: Chief. Mass Media Bureau	PUBLIC REF ROOM

PETITION FOR RIGHT TO MODIFY CONSTRUCTION PERMIT

Comes now, CAPROCK EDUCATIONAL BROADCASTING FOUNDATION, and hereby request the Chief of the FM branch to accept the following Modification of the above numbered Construction Permit.

- 1) The purpose of the attached information is to provide a showing as to why the enclosed modification should be made.
- 2) On February 22, 1988 we received notice from the tower owner, Panhandle Telcom that we could no longer utilize his tower for our antenna. (See attached letter).
- 3) The reasons given were beyond our control and we therefore ask the Commission to allow us to move our antenna location to a new tower site.
- 4) The new site selected will cause no interference problems to either existing or proposed stations.
- 5) In the course of this move we have determined that we would like to utilize the full power and height allocated to a Class A station. (1.5 KW and 134.1 meters). We believe that this will better serve our community and the public interest.
- 6) Due diligence was used in the research and preparation of this modification which is directed toward the adduction of information which is relevant to the instant approval under the Commission's rules.

WHEREFORE, premises considered, and good cause having been shown, it is requested that this Modification be accepted and made a part of the Construction Permit of CAPROCK

EDUCATIONAL BROADCASTING FOUNDATION for the above referenced file number and location.

Respectfully submitted,

T. Kent Atkins,

Trustee,

CAPROCK EDUCATIONAL BROADCASTING FOUNDATION

CERTIFICATION

I hereby certify that all of the information is true, correct and complete to the best of my knowledge.

Dated, March 23, 1988

Signed

Panhandle Telcom

Your Two-Way Radio Specialist 1803 West Jackson Amarillo, Texas 665-6881

Mr. T. Kent Atkins Caprock Educational Broadcasting 2100 Hwy. 360, Suite 1204 Grand Prairie, TX 75050

February 22, 1988

Dear Mr. Atkins,

In regard to your request for tower space on our Lubbock tower, please be advised that we must regrettably decline our previous offer. When we offered Caprock Educational Broadcasting space on the tower in June of 1983, we had only four tenants at the time. During the past five years since we made that commitment to you we have added over eleven new two-way repeaters.

We are denying your request for space for two reasons:

- 1) The wind loading factor of our tower is now at a maximum. We cannot add any additional weight to the tower.
- 2) Having done an intermodulation study we have determined that your frequency would cause interference to the existing tenants.

We wish you luck in your endeavor and hope to serve you in the future.

Yours truly,

Paul Sizemore

Operations manager

Jack Sizeman

United States of America Federal Communications Commission Washington, D.C. 20554

APPLICATION FOR CONSTRUCTION PERMIT FOR NONCOMMERCIAL EDUCATIONAL BROADCAST STATION (Carefully read instructions before filling out Form—RETURN ONLY FORM TO FCC)

For Commission Use Only
File No. Dr. VC) - 88030Km m

Section I			General Information		
Name of Applicant				Street Address	
Caprock Educa	tional B	roadcasting Fo	undation 21(00 Hwy360 Si	ite 1204
City Grand Pr	airi	ı ^e	State	ZIP Code	Telephone No. (Include Area Code)
	Send not	ices and communication	ons to the following nar	med person at the address below:	(214)647–1010
Name				Street Address	
S Oyster			8 3 1 5	Tobin Road	
City			State	ZIP Code	Telephone No.
A in in ia in id ia il 2. This application is fo		□ FM	UA TV	[2,2,0,0,3]-[,,,,	(Include Area Code) (703)573-6765
(a) Channel No. or Frequ	uency: 211	/90.1	(b) Community		0000
			11 h h a	City	State
(butheck one of the foll	owing boxes:		Lubbo	CKIIIII	
	Applic Major Minor Modifi	ation for new station Change in Existing sta Change in Existing sta cation of Construction Iment to Pending Appl	ition; call sign: ition; call sign: Permit; File No. of CP: ication; Reference Num	BPED-831220AI)
NOTE: It is not necessal those other porti	y to use this to	orm to amend a previo rm that contain the am	usly filed application. Shended information.	nould you do so, however, please sul	omit only Section I and
3. Is this application mu	tually exclusi	ve with a renewal appl	ication?		
	_				
f Van State:	O YES	M NO			
f Yes, State:		Call letters:	Community of lie	Cense:	State
		1 1			1 1 1
		<u></u>	<u>-</u>		FCC 340 May 1985

	Above Average terrain (HAA	<u>T)</u> .	Above Mean Sea Level		Above Ground	
Horizontal	134.1	meters	1098.8	meters	132.6	meters
Vertical	<u>134.1</u>	meters	1098.8	meters	132.6	meters

7. Is a directional antenna being proposed?

TYES TO NO

If Yes, attach as Exhibit No. $\frac{N/A}{A}$ an engineering statement with all data specified in Section 73.316(d) of the Commission's Rules.

8.	Transmitter location:	State Texas	County - <u>Lubbock</u>
		City or Town	Street Address (or other identification)
		Lubbock	3.8 mi east of City on FM 114
9.	Overall height of complete structure above appurtenances and lighting (if any, see Part	•	146,0 meters
10.	Attach as Exhibit No. $\underline{E-1}$ map(s) (Sectional	l Aeronautical charts or equiva	lent) of the area proposed to be served and shown thereon:
	(a) Proposed transmitter location and the	radials along which the profile	graphs have been prepared;
	(b) The 1mV/m predicted contour;		
	(c) Area (sq. mi.) and population (latest ce	nsus) within 1 mV/m contour;	
	(d) Scale of miles or kilometers (kilometers	s if available).	
_	Attach as Exhibit No. $\underline{E-2}$ a map (Sectional A contours.) Enter the following from Exhibit above:	Aeronautical charts where obtain 243.9 Gain Area 320.3 Loss Area 39.2	inable) showing the present and proposed 1 mV/m (60 dbu) Proposed Existing sq. mi.
12.	power or antenna above the Cl due to potential intermodulat	percentage of present area) ge. Indicate in question 2(e), S ass A assignment, he ion problems. Applie daries of the principal communication	
13.	location showing the following information:		graphic quadrangles if available) of the proposed antenna ngitude lines clearly marked and showing a scale of statute
	(b) Transmitter location and call letters of a	II AM broadcast stations within	n 2 miles of the proposed antenna location.

14. If there are any FM or TV stations within 200 feet of proposed antenna or non-broadcast radio stations (except amateur and citizens band),

from the applicant accepting full responsibility for the elimination of any objectionable effect on existing stations.

or established commercial and government receiving stations in the general vicinity which may be adversely affected by the proposed operation, attach as Exhibit No. $\underline{E-4}$ the expected effect, a description of remedial steps that may be pursued if necessary, and a statement

15.	Tabulation of Terrain Data. (Calculated in accordance with the procedure prescribed in Section 73.313 of the Commission's Rules utilizing
	7.5 minute topographic maps, if available.)

Radial bearing	Height of antenna,	Predicted Distance		
(degrees true)	radiation center above average elevation of radial (3-16 kilometers)	To the 1 mV/m contour		
	Meters	Kilometers		
0°	Please see Exhibit	E-5		
45°	· Company of the control of the cont			
90°				
135°				
180°				
225°				
270°				
315°	and the state of t			

Allocation Studies

(See Subpart C of Part 73 of the Commission's Rules and Regulations)

16. Is the proposed antenna location within 320 kilometers (199 miles) of the common border between the United States and Mexico?

]_{Yes} 🗓 N

If Yes, attach as Exhibit No. N/Aa showing of compliance with all provisions of the Agreement between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz band.

- 17. With regard to stations within 320 kilometers (199 miles) of the common border between the United States and Mexico, attach as Exhibit No. N/Anformation required in 1/.
- 18. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), then with regard to stations more than 320 kilometers (199 miles) from the common border between the United States and Mexico or if this proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as Exhibit No. E—6a complete allocation study to stabilish the lack of prohibited overlap of contours involving these stations. The allocation study should include the following:
 - (a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.
 - (b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.
 - (c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.
 - (d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.
 - (e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.
 - (f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.
 - (g) A scale of miles and properly labeled longitude and latitude lines, shown across the entire (Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
 - (h) The name of the map(s) used in the exhibit(s).

^{1/} A showing that the proposed operation meets the minimum distance separation requirements. If any separations are proposed that are less than the applicable minimum separation requirements plus 15 kilometers, include these stations. Also include existing stations, proposed stations, and cities which appear in the Table of Assignments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

360, Suite 1204

Address (include ZIP Code)

<u>Grand Prairie. TX 75050</u>

(214) 647–1010

Telephone No. (include Area Code)

Technical Director

☐ Registered Professional Engineer

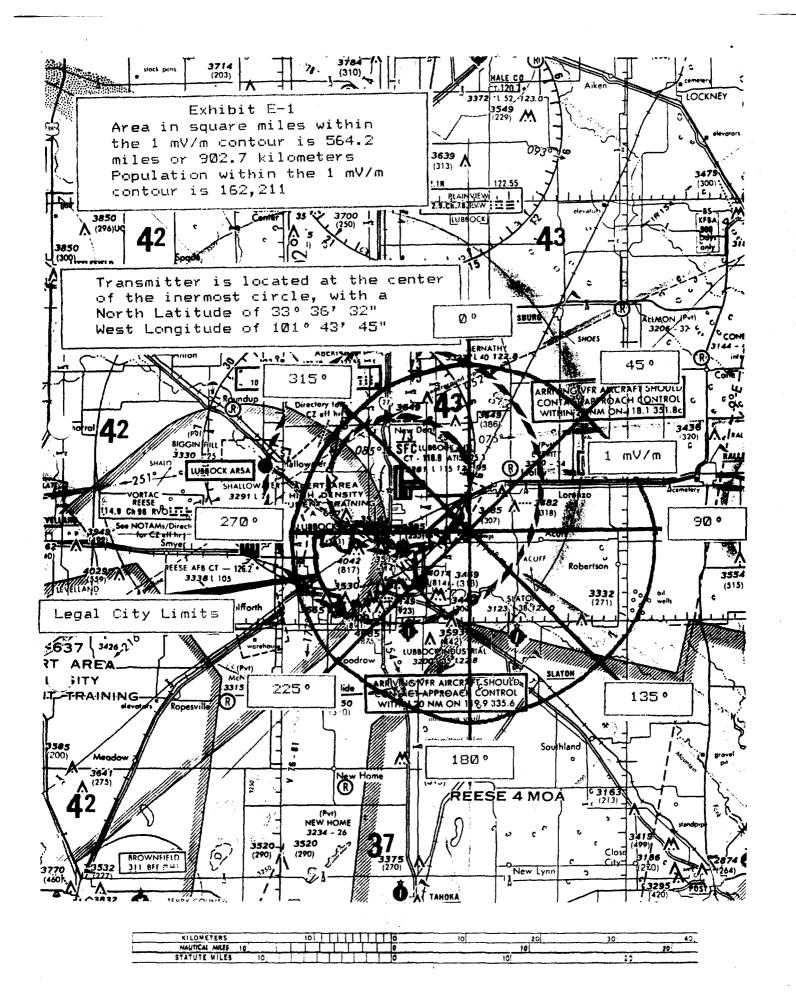
☐ Chief Operator

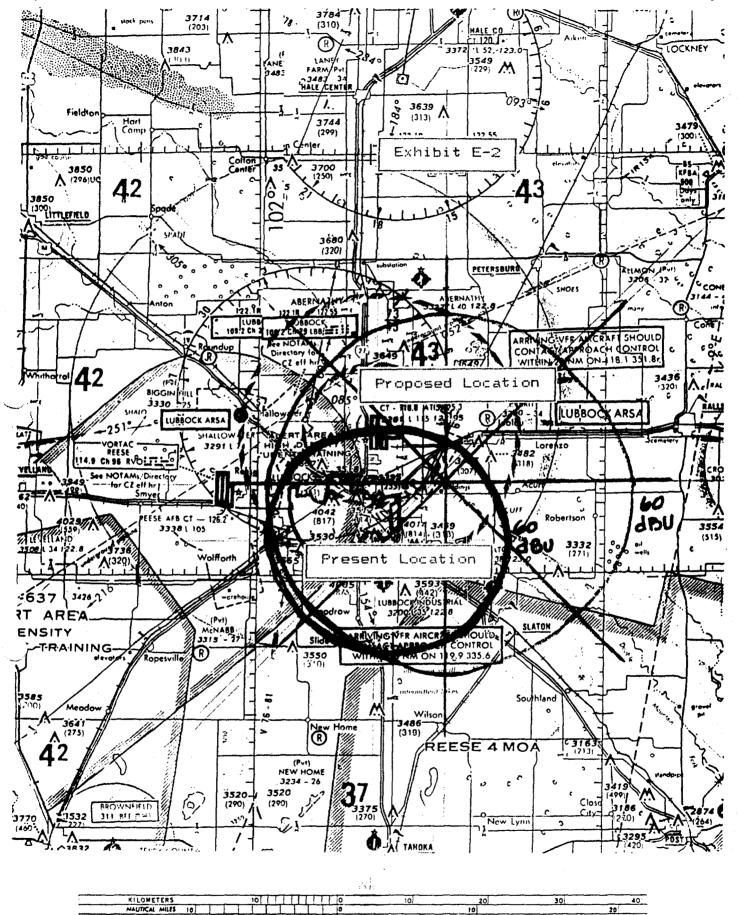
☐ Technical Consultant

☐ Other (Specify)

Section V-G	Antenna	Antenna and Site Information								
Name of Applicant	(Call Sign		Station	Location	1				
Caprock Educational Broadcastin	g Founda	tion K	ECI	Lubb	ock Te	xas		·		
Purpose of Application (Put "X" in appropriate by New antenna construction Alteration of existing antenna structure Change in location	oox)		Facilities SIDE FX15	mo	שענים		EN	U A-	on	
Location of Antenna:		County		City	r Town					
State Texas	Luhl	bock		Lubbo						
Exact antenna location (street address). If o			ame of nes			tance an	d direc	tion o	f antenna	from town.
3.8 mi east of Lubbock on l		iiiio, givo i								
Geographical coordinates (to nearest seco	nd). For dire	ectional ant	enna give	coordin	ates of co	enter of a	ırray.	For sir	ngle vertic	al radiator
North Latitude 33 36	32		West Lo	ongitude			101	43	45	
KVOQ 3. Has the FAA been notified of proposed configuration of the factor of the fact	as filed.	e distance s	and directi	on to the	e nearest	bounda	ry of e	ach la	☐ YES	
Landing Area		Dista	ınce				Dire	ection	ı	
(a) <u>None</u> (b)										<u>.</u> -
See below Attach as Exhibit No a description tional antenna, give spacing and orientation. The tower is a uniform steel.	n of towers.A	Antenna								
Tower		#1	#	2	#3	#4	4	*	95	#6
Overall height above ground (include	meters	146.0	0							
obstruction lighting)	feet	479.0	0							
Overall height above mean sea level	meters	1112.2	2							
(include obstruction lighting)	feet	3649.0								

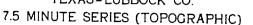
6.		or all significant features. Clear	ly indicate existing port	ing supporting building, if any) giving he ions, noting lighting, and distinguish bet	-
	I certify that I represent the appli- information and that it is true to t			amined the foregoing statement of tech	nica
		·	T. Kent Atkin	s A	
			2 do Hwy 350(Sante 1204	
			Signature (Grand Prairie	Check appropriate box below) TX 75050	
				ess (include ZIP Code)	
<u>'</u>					
			(214) 647-1016 Telepho	ne No. (Include Area Code)	
Ö	Technical Director	☐ Registered Profession	al Engineer	Other (specify)	
_		_			
u 1	Fechnical Consultant	☐ Chief Operator			





KILOMETERS		 10	\Box	П		10	10	20	30 40
NAUTIÇAL MILES	10					0		10	20
STATUTE MILES	10			\Box	\mathbf{I}	0		10	20

BUFFALO SPRINGS LAKE QUADRANGLE TEXAS-LUBBOCK CO.



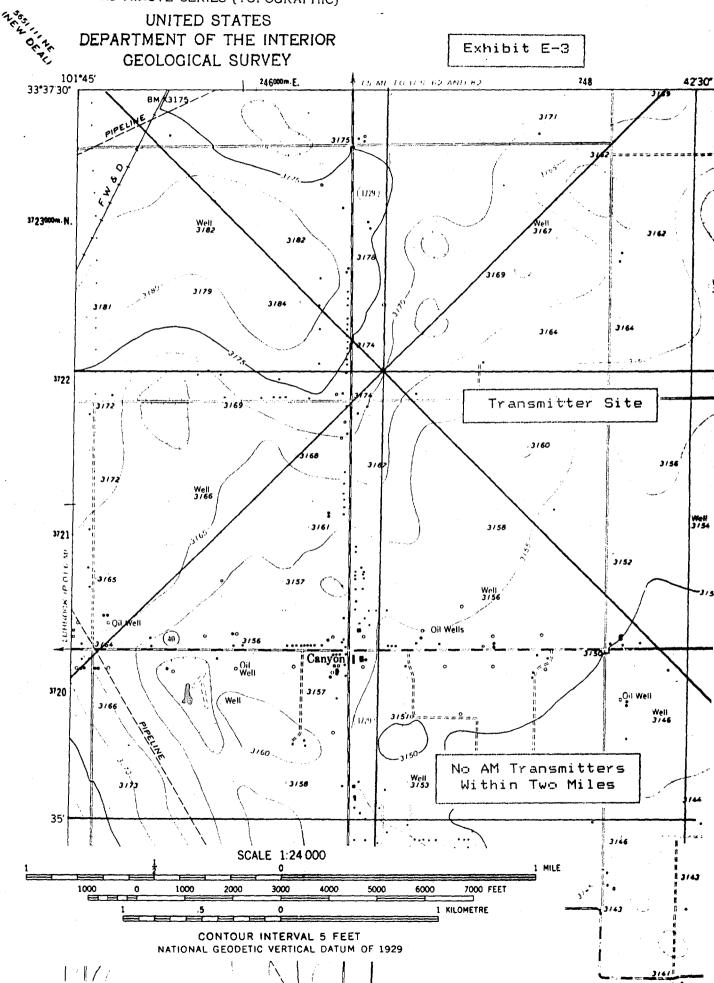


Exhibit E-4

This Applicant has determined that there will be no blanketing at the proposed antenna site. The immediate area is virtually "farm land" and is sparsely populated. An intermodulation study of the existing antenna of KVOQ reveals no interference. Should any blanketing interference occur the Applicant will purchase any filters or take any steps necessary to remedy the problem. The Applicant assumes full responsibility for any such problems should they arise.

Section V-B, 15 Of FCC Form 340

Caprock Educational Broadcasting

Lubbock Texas

Channel 211 Class A

Bearin	ng Average Terrain Radial	Radiation Center A.A.T.	3.16 mV/m Miles/ Kilometers	1 mV/m Miles/ Kilometers
<u> </u>	3225.7/ 983.2	379.40/ 115.6	7.7/ 12.3	13.7/ 21.9
45	3181.3/ 969.7	423.80/ 129.2	8.2/ 13.1	14.4/ 23.0
90	3137.1/ 956.2	468.00/ 142.6	8.6/ 13.8	15.1/ 24.2
135	3103.1/ 945.8	502.00/ 153.0	8.9/ 14.2	15.6/ 25.0
180	3117.1/ 950.1	488.00/ 148.7	8.8/ 14.1	15.4/ 24.6
225	3147.7/ 959.4	457.40/ 139.4	8.5/ 13.6	15.0/ 24.0
270	3180.4/ 969.4	424.70/ 129.4	8.2/ 13.1	14.4/ 23.0
3	3228.4/ 984.0	376.70/ 114.8	7.7/ 12.3	13.6/ 21.8

The Center Of Radiation Above Mean Sea Level is 3605.1 Feet or 1098.8 Meters

The Average Terrain Elevation is 3165.1 Feet or 964.7 Meters

The Radiation Center Above Average Terrain (HAAT) is 440.0 Feet or 134.1 Meters

The Area Within the 1 mV/m Contour is 564.2 Miles or 902.7 Kilometers

March 19, 1988

The following exhibit labeled Exhibit E-5b is included to show the Class A limit of 3 KW at 100 meters at the same site.

It should be noted that the predicted contours that result from the proposed reduced power of 1.5 KW, and increased HAAT of 134.1 in the Applicant's exhibit E-5 does not exceed these predicted contours.

Caprock Educational Broadcasting

Lubbock Texas

Channel 211 Class A

Bearin	ng Average Terrain Radial	Radiation Center A.A.T.	3.16 mV/m Miles/ Kilometers	1 mV/m Miles/ Kilometers
Ø	3225.7/ 983.2	267.32/ 81.5	7.7/ 12.3	13.7/ 21.9
45	3181.3/ 969.7	311.72/ 95.0	8.3/ 13.3	14.7/ 23.5
90	3137.1/ 956.2	355.92/ 108.5	8.9/ 14.2	15.6/ 25. 0
135	3103.1/ 945.8	389.92/ 118.8	9.3/ 14.9	16.3/ 26.1
180	3117.1/ 950.1	375.92/ 114.6	9.2/ 14.7	16.0/ 25.6
225	3147.1/ 959.2	345.92/ 105.4	8.8/ 14.1	15.4/ 24.6
270	3180.4/ 969.4	312.63/ 95.3	8.3/ 13.3	14.7/ 23.5
:	3228.4/ 984.0	264.63/ 80.7	7.6/ 12.2	13.6/ 21.8

The Center Of Radiation Above Mean Sea Level is 3493.0 Feet or 1064.7 Meters

The Average Terrain Elevation is 3165.0 Feet or 964.7 Meters

The Radiation Center Above Average Terrain (HAAT) is 328.0 Feet or 100.0 Meters

The Area Within the 1 mV/m Contour is 597.0 Miles or 955.2 Kilometers

T. Kent Atkins Dallas, Texas

Exhibit E-7

Page 1 March 16, 1988

FM Interference study

Title: LUBBOCK 90.1 BRANDON SITE CLASS A Channel 211A (90.1 MHz) ERP: 3 kW; EAH: 100 m Database: DW 03/09/88	Latitude: 33-36-32 Longitude: 101-43-45 Safety zone: 26 km
Call Auth Licensee name Chan ERP-kW Latit City of License St FCC File no. Freq EAH-m Longit	ude -from (km) (km)
KENW-FM LIC BD OF REGENTS EASTERN NM *208C1 100 34-10 PORTALES NM 89.5 56 103-21 Proposed F(50,50) 100 dBu = 2.201 km; KENW-FM F(50,50) Proposed F(50,50) 60 dBu = 24.32 km; KENW-FM F(50,50)	1-03 112.3 119.4 CLEAR 60 dBu = 41.01 km
ANDREWS TX 89.7 102-32 Proposed F(50,50) 80 dBu = 7.676 km; ALLOC F(50,50)	9-12 208.2 162.1 32.00 2-48 27.8 130.1 CLEAR 60 dBu = 24.32 km 80 dBu = 7.676 km
L (ESA TX 89.9 101-57 Proposed $F(50,10)$ 54 dBu = 36.38 km; ALLOC $F(50,50)$	4-06 192.4 99.25 60.70 7-30 12.3 38.55 CLEAR 60 dBu = 24.32 km 54 dBu = 36.38 km
KPLN-FM LIC PLAINS INDEPENDENT SCHOO *212A 33-11 PLAINS TX 90.3 41 102-45 Proposed F(50,10) 54 dBu = 36.38 km; KPLN-FM F(50,50) Proposed F(50,50) 60 dBu = 24.32 km; KPLN-FM F(50,50)	9-20 64.9 67.58 CLEAR 0 60 dBu = 7.954 km
Swith Street Str	3-12 135.4 176.6 32.00 4-30 316.2 144.6 CLEAR 60 dBu = 24.32 km 80 dBu = 7.676 km
KDTD CP CAPROCK EDUC BCG FOUND *214A .55 34-13 PLAINVIEW TX BPED-840626IG 90.7 102 101-42 CP Granted 03/25/85; Call Granted 07/11/85 Proposed F(50,50) 100 dBu = 2.201 km; KDTD F(50,50) Proposed F(50,50) 60 dBu = 24.32 km; KDTD F(50,50)	2-02 182.2 43.30 CLEAR 60 dBu = 16.07 km
KORQ-FM LIC BAKCOR BCG INC 2640 100 32-24 ABILENE TX 100.7 390 100-06 Was KORQ 11/15/84 100.7 390 100-06	-48 130.9 201.4 32 5-25 311.8 169.4 CLEAR
KPCE CP DOVE BCG INC 265A 1.30 32-25 EUNICE NM BPH-850425IZ 100.9 131 103-09 REPLACES EXPIRED CP	5-53 225.8 186.4 8 9-08 45.0 178.4 CLEAR

United States of America



FEDERAL COMMUNICATIONS COMMISSION

FM BROADCAST STATION CONSTRUCTION PERMIT

Official Mailing Address:

CAPROCK EDUCATIONAL B/CNG FOUNDATION
3515 GOODFELLOW LANE
AMARILLO, TX 79121

Call sign: 840626IE

Permit File No.: BPED-840626IE

- Authorizing Official:

Fice Sconlan

Lisa-Scanlan

Supervisory Attorney, FM Branch Audio Services Division Mass Media Bureau

Grant Date: OCT 1 6 1987

This permit expires 3:00 am. local time 18 months after grant date specified above

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

This permit shall be automatically forfeited if the station is not ready for operation within the time specified (date of expiration) or within such further time as the Commission may allow, unless completion of the station is prevented by causes not under the control of the permittee. See Sections 73.3598, 73.3599 and 73.3534 of the Commission's Rules.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Name of permittee:

CAPROCK EDUCATIONAL BROADCASTING FOUNDATION

Station Location:

TX-LUBBOCK

Frequency (MHz): 90.1

Channel: 211

Class: A

Call sign: 840626IE

Hours of Operation: Unlimited

Transmitter location (address or description):

58TH & QUIRT AVE., LUBBOCK, TX

Transmitter: Type accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Transmitter output power: As required to achieve authorized ERP.

Antenna type: (directional or non-directional): Non-directional

Antenna coordinates: North Latitude: 33 32 31.0 West Longitude: 101 49 9.0

t de la companya de l		Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the horizontal plane (kW)	. :	: 0.64	0.64
Height of radiation center above ground (meters)	• ;	: 85.0	85.0
Height of radiation center above mean sea level (meters)	. :	: 1051.0	1051.0
Height of radiation center above average terrain (meters)	. :	: 82.0	82.0

Overall height of antenna structure above ground (including obstruction lighting, if any) 91.0 meters

Call sign: 840626IE

Obstruction marking and lighting specifications for antenna structure:

It is to be expressly understood that the issuance of these specifications is in no way to be considered as precluding additional or modified marking or lighting as may hereafter be required under the provisions of Section 303(q) of the Communications Act of 1934, as amended.

Paragraph 1.0, FCC Form 715 (March 1978):

Antenna structures shall be painted throughout their height with alternate bands of aviation surface orange and white, terminating with aviation surface orange bands at both top and bottom. The width of the bands shall be equal and approximately one-seventh the height of the structure, provided however, that the bands shall not be more than 100 feet nor less than 1 and 1/2 feet in width. All towers shall be cleaned and repainted as often as necessary to maintain good visibility.

Paragraph 3.0, FCC Form 715 (March 1978):

There shall be installed at the top of the structure one 300 m/m electric code beacon equipped with two 620- or 700-watt lamps (PS-40, Code Beacon type), both lamps to burn simultaneously, and equipped with aviation red color filters. Where a rod or other construction of not more than 20 feet in height and incapable of supporting this beacon is mounted on top of the structure and it is determined that this additional construction does not permit unobstructed visibility of the code beacon from aircraft at any normal angle of approach, there shall be installed two such beacons positioned so as to insure unobstructed visibility of at least one of the beacons from aircraft at any normal angle of approach. The beacons shall be equipped with a flashing mechanism producing not more than 40 flashes per minute nor less than 12 flashes per minute with a period of darkness equal to approximately one-half of the luminous period.

Paragraph 11.0, FCC Form 715 (March 1978):

At the approximate mid point of the over-all height of the tower there shall be installed at least two 116- or 125-watt lamps (A21/TS) enclosed in aviation red obstruction light globes. Each light shall be mounted so as to insure unobstructed visibility of a least one light at each level from aircraft at any normal angle of approach.

Call sign: 840626IE Permit No.: BPED-840626IE

Paragraph 21.0, FCC Form 715 (March 1978):

All lighting shall burn continuously or shall be controlled by a light sensitive device adjusted so that the lights will be turned on at a north sky light intensity level of about 35 foot candles and turned off at a north sky light intensity level of about 58 foot candles.